

The Commonwealth of Massachusetts

Executive Office for Administration and Finance Division of Capital Asset Management One Ashburton Place Boston, Massachusetts 02108

September 12, 2006

TO: Cabinet Secretaries, Division Directors, and Agency Heads

FROM: Mark Nelson, Deputy Commissioner, Office of Facilities Maintenance

RE: Maintenance Standards and Guidelines

I am pleased to share with you our Fiscal Year 2007 maintenance standards for state facilities and ask for your support with this year's submittal. (Sample Assessment Sheets with guidance attached) These standards were created in collaboration with Massachusetts Facilities Managers Association (MAFMA) representatives from various state agencies working with DCAM's Office of Facilities Maintenance (OFM). OFM is charged with implementing programs and procedures to improve state facilities maintenance to maximize the useful life of these capital assets. As many of you know, having well-maintained buildings yields a more efficient use of capital and operating resources as costly emergency and unplanned repair projects are reduced. Having maintenance standards against which facility and agency personnel can measure themselves is an important step in determining what steps need to be taken to improve facilities maintenance. These assessments are valuable information which we will use to develop training, capital project and global planning strategies.

Last year DCAM asked agencies to complete and submit facility self-assessment sheets. Most facilities complied. I thank you for your cooperation and assistance. Tabulating the scores has established a baseline to document changes in each indicator assessment and give an average metric for comparison and tracking.

All state agencies averaged a score of 78.5. The target score is 100.

Based on the recommendation of the MAFMA Standards Committee that an assessment be completed each year, we are e-mailing Standards Assessment Sheets with guidance for each indicator to your facility staff. Included in the transmission is a report of how each facility within a agency rated itself relative to the rest of the agency and across all state agencies. Please note that the chart has been modified by the Standards Committee from last year. We have eliminated one indicator and added further clarification for some other indicators. Most importantly, the ranking has been <u>reversed</u> with the best rating now at "5" and the poorest at "1." Please make sure that whoever does the self assessment this year takes note of the changes and reviews the guidance material before starting the process. Agencies are requested to:

- Perform a self-audit of building maintenance on the buildings under their control during the month of September.
- Use the Status Chart to record audit results.
- Submit (by mail, fax, electronically) results on the audit to DCAM no later than October 27, 2006.
- Report only on buildings that are occupied daily by state employees and have an area of over 5000 gsf.
- Use my staff to resolve any questions or problems. Call me or Tom Tagan, at 617-727-4030 ext. 237 & 272 respectively.

- Thank you again for your cooperation in this process.

Enclosure (1) Standard Assessment Sheets with guidance on ranking indicator levels

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MAINTENANCE STANDARD STATUS CHART (Indicate your Level for each indicator)

#	Weight	INDICATOR	LEVELS					
			1 CRISIS	2 REACTIVE	3 ADEQUATE	4 COMPREHENSIVE	5 EXCEPTIONAL	
1	1.5	Routine Service Response	1 YR	3 months	1 month	2 weeks	Immediate	
2	1.5	Comfort level/ Climate Control service response	1 month	2 weeks	1 week	1-3 days	Immediate	
3	1.5	Customer Perception	Critical	Basic	Tolerable	Complimentary	Pride	
4	1.5	Emergency Maintenance Work Orders	>20%	15-20%	10-15%	5-10%	0 - 5%	
5	1.5	PM vs Repair Maintenance	0 - 10 %	10 - 30 %	30 - 50 %	50 - 70 %	70 -100 %	
6	1.0	Work Order Backlog	Much Above Average	>Average	Average	Below Average	NIL	
7	1.5	Breakdown Maintenance	Most need repair	Many need repair	Occasional breakdowns	Component Failure	Rarely	
8	1.0	Illumination (interior)	Dark	Many out	Generally well lit	Mostly lit	Completely Lit	
9	1.0	Illumination (exterior)	Dark	Many out	Generally well lit	Mostly lit	Completely lit	
10	1.3	Interior Appearance	Dismal finishes	Dingy finish	Average finishes	Better than average finishes	Like new finishes	



MAINTENANCE STANDARD STATUS CHART (Cont.)



11	2.0	Maintenance Staffing	Way too few	Too few	Way too many	Too many	Just right
12	1.5	Envelope Condition	Very poor	Drafty & leaky; unattractive	Minor leaks; average finish	Watertight; good finishes	Like new
13	1.7	HVAC Systems	Completely unreliable	Unreliable	Generally OK	Reliable	Always work
14	1.5	As-builts and manuals	Few to none on hand	Some on hand	Most on hand	All on hand	All, plus others
15	2.0	Code Compliant	Many areas out	Some areas out	Almost all, with no plans to achieve	Almost all, with plans to achieve	Completely
16	1.0	Sustainability	No plans	Few plans	Some plans	Most plans	Plans fully in place and implemented
17	2.0	Maintenance Management Systems	No systems or plans in place.	Systems in place, but not used.	PM, Work Order used sometimes.	PM, Work Order, in use	PM, Work Order, plus some, fully used

Explanatory Notes:

Bldg Name or address or CAMIS #:
Date Audited:
Auditor:



STANDARDS FOR BUILDING MAINTENANCE

GUIDANCE FOR INDICATOR LEVELS



Level 1

CRISIS MAINTENANCE

Level 1 represents the lowest level of maintenance condition and service. The physical environment is "dispiriting."

- 1/2. Service response: One year or more for routine requests. Comfort/climate control/environmental calls take a month or more.
- 3. Building occupants are very critical of the responsiveness and quality of maintenance service, and lack any pride in the appearance and condition of the facility. Complaints about the overall building maintenance condition are constant. *
- 4. Emergency notifications as a % of all notifications: > 20%
- 5. Preventive maintenance vs. repair maintenance: < 10%
- 6. Work order backlog is significantly above the average for similar facilities.
- 7. Most building components are in need of renewal of repair
- 8/9. Illumination in primary areas is dim and shadowy due to many missing or damaged bulbs and diffusers; secondary areas are in darkness due to missing lights.
- 10. Interior finishes and fixtures are in poor condition.
- 11. Severe understaffing; all staff would benefit from additional training.
- 12. Exterior condition and appearance is very poor with significant water and air penetration. Paint is peeling.
- 13. HVAC systems are completely unreliable and/or not properly calibrated, resulting in significant occupant discomfort and consistent operation outside of existing temperature guidelines.
- 14. Few to no building plans available.
- 15. Many building systems are out of code.
- 16. There are no plans to address agency sustainability goals.
- 17. No PM or work order system in place. No work plans.
- * Customer perception of service and facility condition: Critical.



STANDARDS FOR BUILDING MAINTENANCE

GUIDANCE FOR INDICATOR LEVELS



Level 2

REACTIVE MAINTENANCE

Level 2 represents a substandard degree of maintenance service. The physical environment is "uninspiring."

- 1/2. Service response: Within 3 months for routine requests. Comfort/climate control/environmental calls take two weeks.
- 3. Building occupants become more critical of the responsiveness and quality of maintenance service, and lack pride in the appearance and condition of the facility. Complaints about the overall building maintenance condition increase greatly. *
- 4. Emergency notifications as a % of all notifications: 15 20%
- 5. Preventive maintenance vs. repair maintenance: 10 30%
- 6. Work order backlog is above the average for similar facilities.
- 7. Many building components are in need of renewal or repair
- 8/9. Below average illumination with numerous lights out, some missing diffusers; secondary areas are dim due to missing lights.
- 10. Interior finishes and fixtures are below the average condition for similar facilities. Dingy.
- 11. Insufficient staff to maintain facility maintenance needs; most staff would benefit from additional training.
- 12. Exterior components appear rough, worn and unattractive and are drafty and leaky. Finishes are in need of renewal.
- 13. HVAC systems are unreliable and/or inadequately calibrated, resulting in a negative impact on occupant comfort and frequent operation outside of existing temperature guidelines.
- 14. Some manuals and plans for the building are available.
- 15. Out of compliance in several code areas.
- 16. There are few plans, if any, to deal with agency sustainability goals.
- 17. There are PM and work order systems available, but they are not used.
- * Customer perception of service and facility condition: <u>Basic</u>.



STANDARDS FOR BUILDING MAINTENANCE





Level 3

ADEQUATE MAINTENANCE

Level 3 is a sufficient maintenance level, reflecting lower expectations of building maintenance. While not totally acceptable, building maintenance condition has yet to reach an unacceptable level. The physical environment is "ordinary."

- 1/2. Service response: Within 1 month for routine requests. Comfort/climate control/environmental calls take a week.
- 3. Building occupants expect or tolerate interruptions due to breakdowns. Pride in the appearance and condition of the facility begins to decrease. Complaints about the overall building maintenance condition increase. *
- 4. Emergency notifications as a % of all notifications: 10 15%
- 5. Preventive maintenance vs. repair maintenance: 30 50%
- 6. Work order backlog is at the average for similar facilities.
- 7. Building and site areas are mostly functional, but experience occasional breakdowns that may affect availability for use.
- 8/9. Building illumination is generally good, with a small percentage of lights out. 10. Interior finishes and fixtures are in average condition for similar facilities.
- 11. Staffing levels meet facility maintenance needs; some staff would benefit from additional training.
- 12. Exterior component condition and appearance is average with minor leaks and blemishes. Finishes unexceptional.
- 13. HVAC systems are generally reliable with most components properly calibrated, providing acceptable occupant comfort in primary areas of the building in accordance with existing temperature guidelines.
- 14. Most manuals needed to run the building are on hand.
- 15. Most codes are being met, but no effort being made to achieve shortfalls.
- 16. Some sustainability plans have been made to address the agency goals.
- 17. PM, work order system, and plans in place but not always used.
- * Customer perception of service and facility condition: Tolerable.



STANDARDS FOR BUILDING MAINTENANCE

GUIDANCE FOR INDICATOR LEVELS



Level 4

COMPREHENSIVE MAINTENANCE

Level 4 is the base maintenance level at which buildings should be kept. Building occupants are satisfied with the maintenance service and are generally proud of the appearance and condition of the facility. There are very few complaints about the overall building maintenance condition. The physical environment is "**motivational**."

- 1/2. Service response: Within 2 weeks for routine requests. Comfort/climate control/environmental calls addressed in 1-3 days.
- 3. Building occupants are satisfied with the maintenance service and are generally proud of the appearance and condition of the facility. There are very few complaints about the overall building maintenance condition. *
- 4. Emergency notifications as a % of all notifications: 5 10%
- 5. Preventive maintenance vs. repair maintenance: 50 70%
- 6. Work order backlog is below the average for similar facilities.
- 7. Breakdown or emergency maintenance usually due to unpredictable failure of equipment components.
- 8/9. Illumination is bright, clean, attractive with the occasional light out.
- 10. Interior finishes and fixtures are in better than average condition for similar facilities.
- 11. Staffing levels meet short and long term maintenance needs; few staff would benefit from additional training.
- 12. Windows, doors, exterior walls, roof are watertight and finishes appear good.
- 13. HVAC systems operate reliably, are properly calibrated and provide occupant comfort in most parts of the building in accordance with existing temperature guidelines.
- 14. Tech manuals, as-builts and plans are on hand.
- 15. Most codes are met, but some are in process of approval.
- 16. Most sustainability plans and projects are in place and in use.
- 17. A PM and work order management system are in use. Work plans exist.
- * Customer perception of service and facility condition: Complimentary.



STANDARDS FOR BUILDING MAINTENANCE

GUIDANCE FOR INDICATOR LEVELS



Level 5

EXCEPTIONAL MAINTENANCE

Level 5 represents "showpiece quality" maintenance. There are no complaints about the building's maintenance condition. The physical environment is "inspirational."

- 1/2. Service response: Immediate for all requests (routine, comfort/climate control/environmental).
- 3. Building occupants have a high level of trust in maintenance service, and take great pride in the appearance and condition of the facility. *
- 4. Emergency notifications as a % of all notifications: 0-5%
- 5. Preventive maintenance vs. repair maintenance: 70 100%
- 6. No work order backlog.
- 7. Breakdown maintenance is rare and limited to vandalism and abuse repairs.
- 8/9. Illumination is bright, clean, attractive, and fully functional.
- 10. Interior finishes and fixtures are like new.
- 11. Maintenance staff is trained and fully utilized.
- 12. Windows, doors, trim, exterior walls, roof, and finishes are like new.
- 13. HVAC systems are "state of the art," always fully functional and properly calibrated, and provide total occupant comfort in all parts of the building in accordance with existing temperature guidelines.
- 14. Tech manuals, as-builts, O&M plans plus other helpful documents are present for use by the FM team.
- 15. All building codes are met.
- 16. Sustainability plans are in place and being implemented
- 17. FM systems (PM, work order reception, work plans, others) fully used.
- $\ensuremath{^{*}}$ Customer perception of service and facility condition: $\underline{\text{Pride.}}$